

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - Pleasanton, TEXAS

SEEDING REPORT - May 21, 2018

SYNOPTIC/MESOSCALE CONDITIONS:

Upper air analysis shows a trough off low pressures across much of the west and stretching all the way into the Central Plains with a ridge of high pressure across the southeast. At the surface, low pressure is centered across southern Nevada and over the mountains of Mexico with a ridge centered over the southeast. The flow at upper levels is from the west southwest with mainly calm to light and variable winds near the surface. The current dew point temperature is in the mid to upper 60's with much of the south under overcast skies. For today, weak upper level ridge begins to build in but with the decaying stationary frontal boundary, moist airmass and day time heating, isolated and scattered showers and thunderstorms are possible. Some of the Hi-Res models bring some showers and storms in from the Brownsville area and off the coast with thunderstorms developing along the dryline late this afternoon across of eastern New Mexico and northeastern Mexico. The development of these storms will be too late to reach the target areas; thus, any residual precipitation will be during the night period with it being very light. High pressure aloft strengthens and builds in on Tuesday inhibiting convection across much of the target areas. There might be a getaway storm cell from of the western mountains that may escape into the south-central Texas, but I'm not expecting a huge washout as there is going to be very weak upper level forcing. The ridge of high pressure will continue to dominate our weather throughout the remainder of the forecast period bringing drier and warmer conditions. The high temperature for today will be in the upper 80's due to cloud cover and courtesy of the front to across central Texas but the high will rebound to the 90's from tomorrow with morning lows continuing to be above the average each and every single day.

LIFTING MECHANISM:

Weak Upper Level Dynamics, Cool Air Aloft, Frontal Boundary

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4433	CAPE (J/Kg)	183
Precipitable Water (inches)	1.63	CINH (J/Kg)	145
LCL	1087.5	LI(°C)	2.08
CCL	2332.4	PB	2.08
CRP ICA	-3.82	Cloud Base Temp (°C)	22
Cloud Base (meters)	1059		
Warm Cloud Depth (meters)	3374		

DISCUSSION: A remnant cold front was located near KSAT-KDRT-KGTU line. The remnant boundary along with an axis of increased moisture and daytime heating helped to facilitate convective showers. There were few scattered showers and embedded storms that were fairly weak at first that passed mainly to across Beeville and Karnes counties. Much of the storms were to the east of the target counties. With good instability and little no cap, I was able to launch an aircraft. Aircraft 160P was launched over the Live Oak County where a decent cell developed. When the pilot got there the inflow was fairly good, so he released 2 dosages of material. After not much of any changes to the cell, (160P) was sent to the Wilson county where additional dosages were released. There were only two well defined cells that were of significances to seed with much of the activities to the east of our area. Due to the lost

of inflow and cloud base, after two seedings over the Wilson county, 160P headed home for the day.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

1608	1613							
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
21:24	160P	In Air	
21:47	160P	138° @ 24 nm	Live Oak
21:52	160P	141° @ 24 nm	Live Oak
22:21	160P	58° @ 28 nm	Wilson
22:28	160P	59° @ 22 nm	Wilson
23:00	160P	landed	

Seeding operations were conducted in Live Oak(4+0H) and Wilson (4+0H) Counties. 8 flares and 0 hygroscopic flares were burned within 2 clouds. This is the 2nd day for seeding in May and the 2nd day for seeding during the season.